



November 2006

A RESOURCE FOR JOB CORPS ACADEMIC & CAREER TECHNICAL INSTRUCTORS

Memory Difficulties for Students with Learning Disabilities

Have you worked with students with learning disabilities who have trouble remembering names, numbers, and facts, and who sometimes seem to "lose" a skill they could demonstrate competency in the day before?

If so, these students most likely are struggling with memory difficulties. Memory difficulties are not exclusive to the classroom—they can impact a student's experiences and level of success in all aspects of life. The academic and career technical classrooms are good environments, however, to help students learn how to appropriately manage their difficulties with memory through guided practice and reasonable accommodation.



Dr. Mel Levine, author of *A Mind at a Time*, reminds us that "vastly more extensive and strenuous use of memory is required for school success than is needed in virtually any career you can name." Therefore, it is essential that Job Corps staff understand how memory struggles

impact students with these types of deficits and how staff can assist students in being successful in the Job Corps academic and career technical environments.

A common model for explaining memory involves the concepts of short term memory, active working memory, and long term memory. We all struggle with memory efficiency from time to time, but some students with cognitive disabilities may have difficulties with one, two, or all three of these memory types.

More discussion on memory deficits, strategies, and accommodations will be featured in the December edition of "Supporting Students with Disabilities."

So, we would like to hear from you!

Send your questions, case scenarios, or strategies and accommodations suggestions that have proven successful in your classroom or training environment to debbiemjones@adelphia.net. Selected submissions will be published in the next edition.

Types of Memory Storage

Short Term Memory (STM)—Usually only available for a few seconds (most adults can only remember a series of no more than 7 numbers at a time) deciding how the information will be used and if it is to be used or not. STM also serves as a relay station and decides whether to send information to long term memory for later use, to use right away and then forget, or to use right away and save. STM is so short because we are constantly being bombarded with information that has to be processed and sorted for use or discard. All information has to be "recoded" or broken down so we can use it.



Active Working Memory (AWM)—Functions in-between the short and long term memory. Information rests here from seconds to hours. It is the memory that holds on to pieces of information until they blend into a full thought or concept. For example, have you ever gotten up to retrieve an item but then forgot what you got up for? That information had been stored in your AWM but for some reason you were unable to hold onto it long enough for it to be effective. Attention difficulties and anxiety can significantly decrease the efficiency of AWM.

Long Term Memory (LTM)—Provides storage for permanent information. LTM has two stages—filing and access. Information has to be filed into LTM so that we can later retrieve it. There is debate about whether we "lose" information in LTM or it just fades away without use. There is significant evidence that it is lost and not forgotten. We all have had instances where an answer is on "the tip of our tongues" but we can't seem to fully retrieve the data we need; yet, we might spontaneously remember it a few days later. So, the efficiency of a student's ability to recall information is contingent upon whether or not that information was systematically entered into LTM so it could be located and then retrieved.

Job Corps Resources

Job Corps DisABILITY Website

<http://jcdisability.jobcorps.gov/>

Job Corps LD & AD/HD Website

<http://jccdrcl.jobcorps.gov/ld>

Job Corps Health & Wellness Website

<http://jchealth.jobcorps.gov>

COMING SOON!

Additions to the LD & AD/HD Website:

- What is an Individual Education Program (IEP)?
- What are the components of an IEP?
- How might the information contained in the IEP components apply to the Job Corps program?
- What is the Individuals with Disabilities Education Act of 2004 (IDEA 2004)?
- How do I know if my center is required to fulfill the obligations of IDEA 2004?

Accommodating Memory Deficits

"If any one faculty of our nature may be called more wonderful than the rest, I do think it is memory. There seems something more speakingly incomprehensible in the powers, the failures, the inequalities of memory, than in any other of our intelligences. The memory is sometimes so retentive, so serviceable, so obedient – and at others so bewildered and so weak – and at other again, so tyrannical, so beyond control!"

- Jane Austen, Mansfield Park

Ways to Improve Short Term Memory

- Have student read softly to him or herself.
- Have the student visualize the content or its meaning in pictures when reading words.
- Have the student use words to describe pictorial content.
- Slow down the presentation of information.
- Have the student paraphrase what he/she just heard.



Ways to Improve Active Working Memory

- Have the student write down as much information as possible.
- Teach the use of highlighting and underlining important or key points of information and to review these key points on a fairly routine basis.
- Allow the student to tape record the key points while reviewing them—serves as an additional source for ongoing review.

Ways to Improve Long Term Memory

- If a student struggles with identifying reoccurring patterns or themes, provide frequent opportunities to practice and improve his/her ability to recognize these patterns automatically. For example, give multiple word problems and ask the student to identify the operation necessary to solve each problem (i.e., addition, subtraction, division, multiplication). Then have the student talk about what was similar between all the word problems that required subtraction, division, etc. The intent is not to solve the problem at this point but to help the student identify (and recall) reoccurring themes and patterns.
- If a student is really struggling to remember certain information, encourage the "review prior to going to bed and SLEEP on it" technique. Reviewing information just prior to going to sleep aides in consolidating information for improved memory retention.